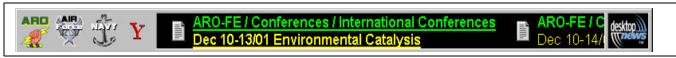
ARO-FE ENVIRONMENTAL Bulletin

October 2001



- Web-Page: www.arofe.army.mil/AROindex.htm; WEB Info: DAndreaG@arofe.army.mil
- Desktop News: http://www.desktopnews.com/download/AroSetup.exe .. Explore / click on any of the Blue Items!



ARO HOME ARL-ERO TRI-SERVICE ASIA

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Have you heard of Eco-Cement?

From the Nikkan

Kogyo Shimbum, 21 September 2001 - http://www.taiheiyo-cement.co.jp/rnglish/index.html

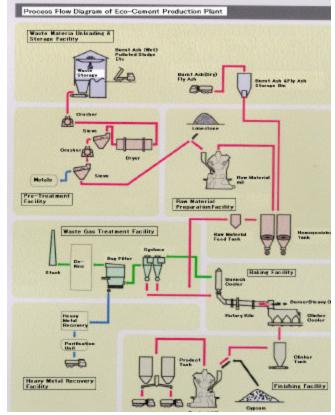
Eco-Cement is made of burnt ash, fly ash from municipal waste incinerator and limestone. The production of Eco-Cement started on April 2001 at the Ichihara Eco-Cement Company at Ichihara-City, Chiba Prefecture. Per year, this company receives 62,000 tons of municipal waste ashes (waste produced by 1.5 million people), 26,000 tons of industrial waste material such as sewage sludge, and produces 110,000 tons Eco-cement. The process consists of seven (7) facilities: Waste Materials Unloading and Storage facility; Waste Materials Pre-treatment facility; Raw material mixing facility; Kiln facility; raw material are baked in the rotary kiln to produce cement. Finishing facility mixing with gypsum to final product (Eco-Cement). Off gases treatment facility; off Gases from the process are treated by cyclone and bag filter. Heavy metal recovery facility; heavy metal included in the ash from bag filter are recovered. The key points of this technology are: 1. Treatment of ash

containing hazardous materials such as Dioxin and Heavy metals; 2. Waste gas treatment from the process;

3. Decomposing /lowering Dioxins concentration. 4. Recovering of Heavy metals. As compared to the standard cement, the Eco-Cement has a higher chlorine concentration (400 ppm vs. 200ppm) and its production cost is high because of the safety measures. However, considering environmental savings, the cost of the Eco-Cement is similar to the cost of the standard one. Note: ARO-FE will be pleased to contact Ichihara Eco-Cement Co. and get more information for you.



http://www.ichiharaeco.co.jp/





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